

REMARKS

Claims 1-40 are all the claims pending in the application.

I. Objection to the Title

The Examiner has objected to the title of the invention as not being descriptive. Applicants have amended the title in a manner to overcome this objection. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the objection to the title.

II. Claim Rejections under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 1-40 under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. In particular, the Examiner has taken the position that the claimed “amplitude measurement means” is not described in the specification. Applicants respectfully disagree.

In particular, Applicants point out that the “amplitude measurement means” corresponds to the level detection portion as described in the specification, and that the level detection portion is described at least at page 27, lines 8-11 of the present application.

In view of the foregoing, Applicants respectfully submit that the claimed “amplitude measurement means” was described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed. Accordingly, Applicants kindly request that the rejection under 35 U.S.C. § 112, first paragraph be reconsidered and withdrawn.

III. Claim Rejections under 35 U.S.C. § 102(b)

The Examiner has rejected claims 1, 5, 17, 21 and 33-38 under 35 U.S.C. § 102(b) as being anticipated by Kishimoto (JP 2000-353324). Applicants respectfully traverse this rejection on the following basis.

A. Claim 1

Claim 1 recites the feature of an amplitude measurement means which measures the amplitude of the signal output from the detracking detection means during operation of the acceleration means. Applicants respectfully submit that Kishimoto does not disclose or suggest at least this feature of claim 1.

Regarding the above-noted feature recited in claim 1, Applicants note that the Examiner has taken the position in the Office Action that Kishimoto discloses such a feature in the Abstract (see Office Action at page 4).

In this regard, Applicants note that the Abstract of Kishimoto discloses that an acceleration end judging part 114 detects when a tracking error signal has reached a fixed level at the time of acceleration. Applicants point out, however, that this disclosure merely indicates that the acceleration end judging part 114 of Kishimoto is able to detect the acceleration period T_{measure} , which is the time period from the beginning of the acceleration to the time when the tracking error signal has reached the fixed level (see Abstract and Fig. 2).

Thus, in Kishimoto, while the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , Applicants respectfully submit the acceleration end judging part 114 does not measure the amplitude of the tracking error signal.

Accordingly, as the acceleration end judging part 114 of Kishimoto does not measure the amplitude of the tracking error signal, Applicants respectfully submit that the acceleration end judging part 114 clearly does not correspond to the claimed feature of an amplitude measurement means which measures the amplitude of the signal output from the detracking detection means during operation of the acceleration means, as recited in claim 1.

Further, Applicants note that claim 1 also recites that the acceleration means modifies the length of time of the acceleration signal based on the amplitude measured by the amplitude measurement means; and that the deceleration means modifies the length of time of the deceleration signal based on the amplitude measured by the amplitude measurement means.

Regarding the above features recited in claim 1, Applicants note that the Examiner has taken the position in the Office Action that Fig. 2 of Kishimoto depicts such features (see Office Action at page 5). Applicants respectfully disagree.

Initially, Applicants note that in Fig. 2 of Kishimoto, the only time period that is modified is the deceleration time period T_2 among the standard acceleration period T_1 , the deceleration time period T_2 , and the acceleration period T_{measure} . Regarding these time periods, Applicants note that the standard acceleration period T_1 is a time period which is not changed, essentially, and the acceleration time period T_{measure} is a time period which is merely measured.

Regarding the deceleration time period T_2 , Applicants note that this time period is modified in accordance with the measured acceleration period T_{measure} . Thus, while the

deceleration time period T2 in Kishimoto can be modified based on the acceleration period T_{measure} , Applicants respectfully submit that the deceleration time period T2 of Kishimoto is not in any way whatsoever modified based on the amplitude measured by an amplitude measurement means.

In view of the foregoing, Applicants respectfully submit that Kishimoto does not disclose, suggest or otherwise render obvious the features of an amplitude measurement means which measures the amplitude of the signal output from the detracking detection means during operation of the acceleration means, wherein the acceleration means modifies the length of time of the acceleration signal based on the amplitude measured by the amplitude measurement means; and that the deceleration means modifies the length of time of the deceleration signal based on the amplitude measured by the amplitude measurement means, as recited in claim 1.

Accordingly, Applicants submit that claim 1 is patentable over Kishimoto, an indication of which is kindly requested.

B. Claim 5

Regarding claim 5, Applicants note that this claim recites the features of a first amplitude measurement means which measures the amplitude of the signal output from the detracking detection means during operation of the acceleration means; and second amplitude measurement means which measures the amplitude of the signal output from the detracking detection means during operation of the deceleration means; wherein the acceleration means modifies the length of time of the acceleration signal based on the amplitude measured by the first amplitude measurement means; and wherein the deceleration means modifies the length of time of the deceleration signal based on the amplitude measured by the second amplitude measurement means.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 5. Accordingly, Applicants submit that claim 5 is patentable over Kishimoto, an indication of which is kindly requested.

C. Claim 17

Regarding claim 17, Applicants note that this claim recites the features of an amplitude measurement means which measures the amplitude of the signal output from the convergence state detection means during operation of the acceleration means; wherein the acceleration means modifies the length of time of the acceleration signal based on the amplitude measured by the amplitude measurement means; and wherein the deceleration means modifies the length of time of the deceleration signal based on the amplitude measured by the amplitude measurement means.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 17. Accordingly, Applicants submit that claim 17 is patentable over Kishimoto, an indication of which is kindly requested.

D. Claim 21

Regarding claim 21, Applicants note that this claim recites the features of a first amplitude measurement means which measures the amplitude of the signal output from the convergence state detection means during operation of the acceleration means, and second amplitude measurement means which measures the amplitude of the signal output from the convergence state detection means during operation of the deceleration means; wherein the acceleration means modifies the length of time of the acceleration signal based on the amplitude measured by the first amplitude measurement means; and wherein the deceleration means modifies the length of time of the deceleration signal based on the amplitude measured by the second amplitude measurement means.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 21.

Accordingly, Applicants submit that claim 21 is patentable over Kishimoto, an indication of which is kindly requested.

E. Claim 33

Regarding claim 33, Applicants note that this claim recites the features of an amplitude measurement portion which, during acceleration of the light beam by the acceleration signal, measures the amplitude of a tracking error signal the amplitude of which changes according to the positional relationship between the focal spot of the light beam and a track; wherein the acceleration portion modifies the length of time of the acceleration signal based on the amplitude measured by the amplitude measurement portion; and wherein the deceleration portion modifies the length of time of the deceleration signal based on the amplitude measured by the amplitude measurement portion.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 33. Accordingly, Applicants submit that claim 33 is patentable over Kishimoto, an indication of which is kindly requested.

F. Claim 34

Regarding claim 34, Applicants note that this claim recites the features of a first amplitude measurement portion which, during acceleration of the light beam by the acceleration signal, measures the amplitude of a tracking error signal the amplitude of which changes according to the positional relationship between the focal spot of the light beam and a track; and a second amplitude measurement portion which, during deceleration of the light beam by the deceleration signal, measures the amplitude of the tracking error signal; wherein the acceleration portion modifies the length of time of the acceleration signal based on the amplitude measured by the first amplitude measurement portion; and wherein the deceleration portion modifies the length of time of the deceleration signal based on the amplitude measured by said second amplitude measurement portion.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 34. Accordingly, Applicants submit that claim 34 is patentable over Kishimoto, an indication of which is kindly requested.

G. Claim 35

Regarding claim 35, Applicants note that this claim recites the features of an amplitude measurement portion which, during acceleration of the light beam by the acceleration signal, measures the amplitude of a tracking error signal the amplitude of which changes according to the positional relationship between the focal spot of the light beam and a track; wherein the acceleration portion modifies the length of time of the acceleration signal based on the amplitude measured by said amplitude measurement portion; and wherein the deceleration portion modifies the length of time and peak value of the deceleration signal based on the amplitude measured by said amplitude measurement portion and on the time measured by a movement time measurement portion.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 35. Accordingly, Applicants submit that claim 35 is patentable over Kishimoto, an indication of which is kindly requested.

H. Claim 36

Regarding claim 36, Applicants note that this claim recites the features of a first amplitude measurement portion which, during acceleration of the light beam by the acceleration signal, measures the amplitude of a tracking error signal the amplitude of which changes according to the positional relationship between the focal spot of the light beam and a track; and

a second amplitude measurement portion which, during deceleration of the light beam by the deceleration signal, measures the amplitude of the tracking error signal; wherein the acceleration portion modifies the length of time of the acceleration signal based on the amplitude measured by the first amplitude measurement portion; and wherein the deceleration portion modifies the length of time and peak value of the deceleration signal based on the amplitude measured by the second amplitude measurement portion and on the time measured by the movement time measurement portion.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 36. Accordingly, Applicants submit that claim 36 is patentable over Kishimoto, an indication of which is kindly requested.

I. Claim 37

Regarding claim 37, Applicants note that this claim recites the features of an amplitude measurement portion which, during acceleration of the light beam by the acceleration signal, measures the amplitude of a focusing error signal the amplitude of which changes according to the convergence state of the light beam; wherein the acceleration portion modifies the length of time of the acceleration signal based on the amplitude measured by said amplitude measurement portion; and wherein the deceleration portion modifies the length of time of the deceleration signal based on the amplitude measured by said amplitude measurement portion.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 37. Accordingly, Applicants submit that claim 37 is patentable over Kishimoto, an indication of which is kindly requested.

J. Claim 38

Regarding claim 38, Applicants note that this claim recites the features of a first amplitude measurement portion which, during acceleration of the light beam by the acceleration signal, measures the amplitude of a focusing error signal the amplitude of which changes according to the convergence state of the light beam; and a second amplitude measurement portion which, during deceleration of the light beam by the deceleration signal, measures the amplitude of the focusing error signal; wherein the acceleration portion modifies the length of time of the acceleration signal based on the amplitude measured by the first amplitude measurement portion; and wherein the deceleration portion modifies the length of time of the deceleration signal based on the amplitude measured by the second amplitude measurement portion.

As discussed above with respect to claim 1, in Kishimoto, the acceleration end judging part 114 is able to detect the acceleration period T_{measure} , wherein the deceleration time period T_2 can be modified in accordance with the measured acceleration period T_{measure} .

Applicants respectfully submit, however, that Kishimoto does not disclose, suggest or otherwise render obvious the above-noted combination of features recited in claim 38. Accordingly, Applicants submit that claim 38 is patentable over Kishimoto, an indication of which is kindly requested.

IV. Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 2-4, 6-16, 18-20, 22-32, 39 and 40 contain allowable subject matter.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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